AMENDMENTS TO THE CLAIMS

The following is a complete listing of the claims indicating the current status of each claim and including amendments currently entered as highlighted.

1-25 (canceled)

26. (currently amended) A system for electrochemical assay of nitro-aromatic compounds, comprising:

(a) a working electrode having a surface of carbon and gold, wherein said surface is modified by a monomeric amino-aromatic compound by treatment thereof with said monomeric amino-aromatic compound dissolved in an organic polar solvent.

27. (previously added) The system, according to claim 26 wherein said monomeric amino-aromatic compound is selected from the group consisting of alkyl-aniline compounds, halide derivatives of alkyl-aniline compounds and hydroxyl- aniline compounds.

28. (previously added) The system, according to claim 26, wherein said monomeric amino-aromatic compound is selected from the group consisting of phenylene-diamine, diphenylene-diamine, and diphenylene-triamine.

29. (previously added) The system, according to claim 26, wherein said monomeric amino-aromatic compound is aniline.

30. (previously added) The system, according to claim 26, wherein said organic polar solvent is a polar aprotonic solvent.

31. (previously added) The system, according to claim 26, wherein said organic polar solvent is dimethylsulfoxide.

32. (previously added) The system, according to claim 26 wherein said monomeric amino-aromatic compound is in a range of one to five per cent solution in said organic polar solvent.

33. (previously re-presented) The system, according to claim 26, wherein said working electrode includes at least one element selected from the group consisting of carbon and gold.

34. (previously re-presented) The system, according to claim 26, wherein said working electrode includes submicron particles.

35. (previously added) The system, according to claim 26, wherein said working electrode includes elemental gold deposited on carbon, wherein the gold is of average thickness less than one nanometer.

36. (previously re-presented) The system, according to claim 26, wherein said working electrode includes carbon paper.

37. (previously added) The system, according to claim 26, further comprising,

(b) an electrolyte for dissolving the nitro-aromatic compounds;

wherein said electrolyte is a mixed solvent including water and an organic solvent.

38. (previously re-presented) The system, according to claim 37 , further comprising

(c) a mechanism for inputting air suspected to include the nitro-aromatic compounds, into said electrolyte in order to dissolve the nitro-aromatic compounds in said electrolyte.

39. (previously added) The system, according to claim 37, wherein said organic solvent is selected from the group consisting of aprotonic solvents, and organic dipolar solvents.

40. (previously added) The system, according to claim 37, wherein said organic solvent is selected from the group consisting of dimethylformamide, acetonitrile, propylene carbonate.

41. (previously added) The system, according to claim 37 , wherein said organic solvent is selected from the group consisting of ethanol, propanol, ethylene-glycol, and propylene-glycol.

42. (previously added) The system, according to claim 37, wherein said electrolyte has a pH greater than 8.

43. (previously added) The system, according to claim 37, wherein said electrolyte has a pH greater than 7.

44. (currently amended) ~~The system, according to claim 26, further comprising:~~

A system for electrochemical assay of nitro-aromatic compounds, comprising:

(a) a working electrode having a surface modified by a monomeric amino-aromatic compound by treatment thereof with said monomeric amino-aromatic compound dissolved in an organic polar solvent; and

(b) an electrolyte for dissolving the nitro-aromatic compounds;

wherein said electrolyte is a mixed solvent including a water buffer of pH greater than 8, ethanol and acetonitrile.

45. (canceled)